

**MODEL FOR NEURODEGENERATIVE DISEASES INVOLVING  
AMYLOID ACCUMULATION.**

**ABSTRACT OF THE DISCLOSURE**

The present invention provides brain cells, such as normal brain cells, apolipoprotein E deficient brain cells, or apoE4 containing brain cells, that are treated with a compound which can modulate integrins and/or integrin receptors to produce increased sequestration of and/or accumulation of and/or uptake of A $\beta$ , and/or changes in cathepsin D content and/or lysosomal dysfunction, and/or microglia activation in the brain cells. The present invention also provides methods for producing such cells and methods for using the cells for screening an agent or substance that modulates the sequestration of and/or accumulation of and/or uptake of A $\beta$ , and/or lysosomal dysfunction, and/or changes in cathepsin D content and/or microglia activation in the brain cells. The method further provides a new therapeutic target, antagonism of glutamate receptors, for the treatment of neurodegenerative diseases which are characterized by *inter alia*, abnormal amyloid uptake and/or accumulation.

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